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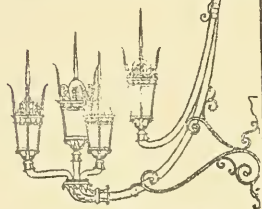


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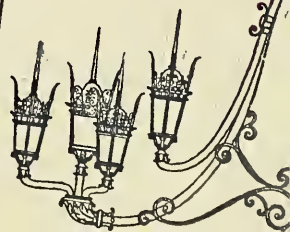
SOUTH STATION TECHNOPOLIS

OFFICE/BIOMEDICAL RESEARCH CENTER



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BOSTON REDEVELOPMENT AUTHORITY
TUFTS UNIVERSITY DEVELOPMENT CORPORATION







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The Tufts University Development Corporation has been awarded the developer designation for the South Station Technopolis Project. The proposed development will be constructed on air-rights over the existing rail lines and a public bus facility. The project will include 350,000 square feet of biomedical research space built over the bus facility, a one million square foot office building to complete Dewey Square, 650,000 square feet of biomedical research and complementary uses adjacent to the office building, and 1,100 above-grade parking spaces built over the entire air rights site. The South Station Technopolis, at six acres the largest development site in downtown Boston, includes one of the last locations available for large-scale office development in downtown Boston. In addition, the parking supply in this area of the downtown is expected to become constrained with the demolition of a city-owned garage, the construction of a new Federal courthouse on open air parking lots nearby, and the removal of parking lots currently in the path of the new Central Artery and Third Harbor Tunnel.

This confidential informational memorandum is intended solely for the purpose of soliciting expressions of interest from qualified financial sources and developers. The information contained within does not purport to be all inclusive or to contain all the information necessary which a potential lender or investor might require. The Boston Redevelopment Authority and Tufts University Development Corporation do not make any representation or warranty, expressed or implied, as to the accuracy or completions of the proposed.



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EXECUTIVE SUMMARY

The Boston Economy

The sharp decline of the Massachusetts economy that began in 1988 is ending, and a gradual recovery is expected to begin in late 1991. Statewide unemployment was 9.1 percent in July 1991, down from the previous month's 9.5 percent level and May's 9.6 percent. As the region's economic center, Boston has experienced a recession as well, but its performance has been stronger than that of the state. Boston's unemployment rate has been consistently lower than the statewide figure. The City of Boston's bond rating is at its highest level in years; after being raised five times during the 1980s, it has remained at an "A" level despite the regional downturn.

Recent forecasts by prominent area economists project that recovery will begin in late 1991 or early 1992, with the upturn progressing slowly in 1992 and strengthening thereafter. Analysts attribute the coming turnaround to several factors, including the recent bipartisan agreement to balance the state budget without raising taxes, the confirmation of Fleet/Norstar as the buyer of the Bank of New England, the reduction in business and housing costs in the region, and growing consumer confidence and home sales.

For an investor in Boston's future, more important than short-term forecasts are recent studies demonstrating the fundamental strength of the region's economy. Boston and Massachusetts remain home to many of the world's most renowned research institutions, technologically-advanced companies, universities, venture capital firms,

and sophisticated finance and services companies. In-depth analyses by Harvard Professor Michael Porter and prominent Boston economist James Howell document that these institutions and industries provide the necessary foundation for an innovation-oriented economy which should perform well in the 1990s and beyond as the state emerges from recession. Investors who recognize this strength and can plan for the long term will find outstanding opportunity in the Boston market.

Boston is unique among American cities in the number and size of permanent institutions that provide the basis for much of its economic activity. It is the world's premier center for hospitals, colleges and universities, including Boston University, Massachusetts General Hospital, the New England Medical Center, Tufts University Medical School, Brigham and Women's Hospital, among others, in addition to Harvard and M.I.T. in neighboring Cambridge. It is the nation's largest center for medical research, carried on at 31 institutions within the city limits. As a major government center, Boston not only is the capital of Massachusetts but is the regional center for Federal activity, including a Federal Reserve Bank. Adding to this New England's premier sports and cultural facilities and the region's major airport, it is no wonder that Boston is called the "Hub" of New England. All of these institutions are here to stay, providing a diverse, extremely stable base for the city's economy.

South Station Technopolis

At the center of this "Hub" stands South Station, squarely in the Financial District, and an exceptional site for a large scale development project combining medical research

facilities, parking, office space, and retail activities. South Station is located within three blocks of the major medical care and research institutions of New England Medical Center and Tufts University, and boasts of unsurpassed transportation access into and out of the city and to the airport.

Transportation

Sited atop rapid transit and next to the juncture of the major highways leading north, south and west of Boston, South Station is also the city's major suburban and national rail terminus. More than 36,000 commuters pass through the station daily. The station will in several years have fast direct links to New York by high speed rail, to international and domestic destinations through rapid transit connections to Logan International Airport, and to suburban and regional destinations through expanded rail services and a new bus station.

Logan Airport already is the closest international airport to an American downtown. With the completion of a new Harbor Tunnel linking South Station directly to Logan, frequent shuttle service within dedicated lanes will put the station only moments away from the airport. In fact, Tunnel planners have envisioned South Station containing a ticketing and baggage handling terminal so that passengers can bypass the terminals at Logan and board planes directly.

With the recent Federal commitment to high speed rail between South Station and New York, tenants of the Technopolis will be less than 3 hours from downtown

Manhattan on comfortable, modern trains. For everyday commuting, workers will have direct road, rail and subway links to Boston's most desirable residential neighborhoods and suburban towns.

Finally, South Station will be the terminus of the transit line linking the new Federal Courthouse on Fan Pier to downtown Boston, and is under consideration as the downtown terminus for a new subway line -- the proposed bio-science line -- linking the major medical and scientific research institutions in Boston and Cambridge. South Station will be the premier location for law firms and other tenants who need a location close to the courthouse yet still in the downtown hub, and for services firms who want direct access to Boston's growing medical and scientific economy.

Parking Garage

A 1,100 space public parking garage at the South Station Technopolis will have direct off-ramp access from the Massachusetts Turnpike, and will be one block from the Central Artery, Boston's north-south highway. At the same time, it is located within a ten-minute walk of every location in Boston's Financial District.

The garage will serve a number of markets, meeting both short term and long term demand. First, it will help to replace the hundreds of parking spaces in the surrounding area being lost over the next few years to the Artery/Tunnel Project, to the demolition of a nearby city-owned garage, and to the construction of a Federal Courthouse on nearby parking lots. At the same time, during the Artery construction

period commuters currently using parking in the heart of downtown and across the Fort Point Channel will be searching for easier-to-reach alternatives on the southern edge of the Financial District, close to the major highways. No site is better located for this purpose than South Station.

The Artery/Tunnel Project and three other major construction projects over the next few years will displace over 5,200 parking spaces within a half-mile radius of South Station. However, the Artery Project will not provide any replacement parking in this area, which encompasses virtually all of Boston's Financial District, with 26.6 million square feet of Class A office space. Nearly 3,000 of these spaces will be lost permanently, while about 2,300 more will be displaced for several years by the Artery/Tunnel construction.

South Station is the ideal location for replacement parking on the southern side of the Financial District because commuters using the Massachusetts Turnpike and the Southeast Expressway can directly access the site without use of local streets and without entering the traffic-clogged Central Artery. The garage entrance will be located directly off the first downtown exit and entrance ramps of these highways.

When the new Third Harbor Tunnel connecting the Massachusetts Turnpike to Logan Airport is completed in 1995, the South Station parking garage also will have the best airport access of any parking facility in downtown Boston. In addition, in the late 1990s a high-speed rail line linking South Station and New York City in less than three

hours will be completed. Users of this rail line can be expected to part at South Station.

A second market for a parking garage at South Station would be workers in nearby office buildings with inadequate parking of their own, including both recently-built towers and many older structures that lack indoor parking entirely. Many of these workers now park in the lots and garages described above that will be displaced or rendered inaccessible by construction projects.

The parking garage's third market serves the needs of later phases of the South Station Technopolis development program, such as the 1,000,000 square feet of laboratory, research and other complementary space and potential 1,000,000 square feet of office space allowable on the site. The 1,100 spaces would accommodate 0.55 parking spaces per 1000 square feet of research space, and 0.8 spaces per 1000 feet of office space. The office building parking ratio is among the top four of all major Financial District office projects.

Medical Research

The demand for new medical research space in Boston will be a significant component of the future development economy of Boston. The city's concentration of research institutions and scientists places it in a premier position for new growth in this sector.

The City of Boston is the nation's largest recipient of federal medical research grants, totaling more than \$500 million in 1990 alone. Dozens of hospitals and medical research institutions and medical-related companies make it a world center for dynamic health-related industry. Out of this intense environment come innovative new drugs, treatments and equipment-- developed in the research labs, tested and refined in the hospitals, and produced by spin-off companies.

In today's highly competitive world economy, advantages are gained by those companies located in an environment which spurs innovation and high productivity. Access to a highly skilled labor force of scientists, doctors, and technicians, to world-renowned health research and care institutions, and to professional and financial services attuned to specialized needs-- all are essential to success in biomedical research, biotechnology and other health-related fields.

The Tufts International Research Center at the South Station Technopolis will offer companies worldwide the opportunity to tap into Boston's advantages. Companies joining the Technopolis will become part of the research and teaching complex of Tufts University, a leader in biomedical science which has committed itself to the tenancy of

a minimum of 100,000 square feet. The Tufts University-New England Medical Center complex, located three blocks from South Station, received about \$37 million in Federal National Institutes of Health (NIH) research grants during fiscal year 1990 alone. The New England Medical Center individually is the nation's sixth-largest independent research hospital recipient.

By establishing links to the doctors and scientists carrying on pathbreaking research at the University, companies can cut their product development times dramatically. Companies also can use the New England Medical Center and other world-renowned Boston hospitals to test new products. This competitive edge can translate into commercial success.

Office Space

The South Station Technopolis includes one of the last available sites for large-scale office development in downtown Boston, and can be the premier office location for downtown Boston in the latter part of this decade.

Although office vacancy rates are currently high for Boston-- 14.9 percent for Class A space in the first quarter of 1991-- this rate is well below the national average of 17.5 percent. New data for the second quarter indicate that rates are falling or stable. The longer-term outlook indicates that a tighter market is likely to return by the late 1990s, with very few projects coming on line to meet demand.

South Station also offers a unique locational advantage because of its proximity to transit, highways and to a new federal courthouse. In addition, the City of Boston recently rezoned the entire downtown area. Only three sites in the Financial District are zoned for office buildings of more than 500,000 square feet, with South Station offering the best transportation access and most central location of the three. The adjacent historic district has been downzoned to permit buildings of no more than 100 feet in height.

Currently in Boston's Financial District, less than 1.2 million square feet of Class A office space is under construction in just two projects. One will come on line in 1991--125 High Street Phase II. The second project, International Place II, is expected to be the only major Class A project to come onto the market between 1992 and 1996, and will be completed at the end of 1992. Using modest assumptions of gradually increasing demand rising to Boston's twenty-year average absorption rate, the effect will be vacancy rates that sharply decline during the 1992-96 period, reaching the 6 to 8 percent range by 1996.

To enter this relatively tight market in 1996 and beyond, only two major downtown office projects are anticipated to go forward: One Lincoln Street and the South Station Technopolis office tower. An additional project, the Prudential Center tower, is located in the Back Bay a mile away, a market dominated by insurance, advertising and other industries. Financial District industries generally do not locate in the Back Bay, and

vice-versa. This leaves One Lincoln and South Station alone to serve the Financial District market.

Because of their locations, these two buildings may serve different market segments. In 1997, a major shift in Boston's center of gravity will occur: the Federal Courthouse will be moved from Post Office Square in the center of the downtown, to Fan Pier across the Fort Point Channel to the south. Law firms seeking a location close to the new courthouse, yet still within the downtown, will look to South Station, from which the new transit line connecting the courthouse to downtown will run. Law firms which employed an estimated 11,800 people in downtown Boston in 1990 and other companies attracted by South Station's excellent transportation access should take great interest in the Technopolis office tower.

This shift in Boston's center of gravity has already gained momentum over the past several years as a number of major office projects were completed in the South Station area. Millions of square feet in such projects as 150 and 160 Federal Street, 99 and 125 Summer Street, One Financial Center and 600 Atlantic Avenue have pulled the Financial District's employment activity directly to the South Station area. The primary site in the center of this activity is South Station itself.

SOUTH STATION TECHNOPOLIS
Office/Biomedical Research Center
Development Proposal

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Project Summary

South Station Project Description

Introduction

Almost 100 hundred years since the 1899 construction of South Station, the complex is undergoing a profound transformation. In a sense, its transformation parallels the direction of the Boston economy as a whole. If one real estate development project is a metaphor for the future of the Boston economy, that project is South Station. 18

What was South Station?

Since its opening in 1899, South Station has occupied a pivotal location in the development of Boston's economy. As the country turned from an agrarian to a manufacturing nation, South Station served as a terminus for the transport of goods and people from points south into the downtown. As the use of rail diminished in the post World War II era, South Station's importance declined somewhat, although it continued to serve suburban commuters, local subway riders, and travelers along Amtrak's Northeast Corridor. During all of this time, South Station was a railroad terminal but nothing more.

What is the South Station Redevelopment Project today?

South Station is proposed to be redeveloped into a complex of more than 2 million square feet of office, medical research, and retail space, in addition to a regional bus facility and a large public parking garage. Its site occupies about six acres in

downtown Boston. Some of the individual components of the complex are already completed, others are funded and about to start up, while others are in the early planning stages and require a developer.

The following is a description of the elements of the South Station redevelopment project already completed:

- o **the Historic South Station Headhouse.** Built by the distinguished Boston architectural firm of Shepley, Rutan, and Coolidge, this gracious five-story curved building was recently restored by the Beacon Development Company. Its landmark facade faces Dewey Square, the most intensively developed area of Boston in the 1980s. Its interior is evocative of the grand era of rail travel with elegant furnishings, restored architectural details, and superb craftsmanship. The Headhouse contains ticketing for all commuter and Amtrak trains, many retail stores, and office space.

- o **the Trains.** All train tracks and platforms have been completely reconstructed by the regional transportation agency, the Massachusetts Bay Transportation Authority (MBTA). Approximately 36,000 commuters arrive into South Station daily. The local subway system can also be accessed directly from inside South Station. Amtrak commuter rail connects to Providence, New York, Philadelphia, Baltimore and Washington, D.C.

The following is a description of each element of the South Station redevelopment project to be completed:

- o **the Bus Terminal.** \$75 million in public funds is committed to the construction of a modern terminal for city and commuter buses along with accessory parking. The bus terminal will be constructed and operated by the MBTA. The terminal will not extend to the Headhouse, but only to a point along Atlantic Avenue at column line 20/21 (see attachment, Tab 10). Construction will begin in mid-1992.
- o **the Parking Garage.** The South Station site has the capacity for a 1300-car parking garage. As part of its development program, the MBTA will build a total of 200 parking spaces on one level above the bus terminal for high occupancy vehicles. Service and loading for the buildings above will also be provided on the MBTA's parking level. In addition, a total of 1,100 public parking spaces will be built, 550 on two levels above the MBTA facility, and 550 on five levels between the Headhouse and the bus terminal.
- o **the Bio-Medical Research Space.** Two buildings of 175,000 square feet each are proposed for the development of biomedical research and development space above the bus terminal. The space will be devoted to scientific research conducted in the laboratory, proto-type manufacturing, and new product development. Two additional buildings of a total of 650,000 square feet can be

built adjacent to the office tower. Tufts University has already committed itself to the tenancy of 100,000 square feet of the first building for its own medical research purposes.

- o **the Office Tower.** The site is ideally suited for a high-rise development which could house either a single large office building, or an office building and a hotel or additional research related space. With a front door on Dewey Square, spectacular harbor and downtown views, the best transportation infrastructure in Boston, and virtually no other sites zoned for high-rise office development downtown, South Station is the site for a premier office development of 1,000,000 square feet.

Where is the South Station Redevelopment Project?

South Station anchors one corner of Dewey Square in the heart of Boston's Financial District. It is flanked on one side by the Federal Reserve Bank tower, which was built in 1976 and houses the regional Federal Reserve Bank headquarters, and on the other side by One Financial Center, a 46-story tower built in 1983.

The last few years have further transformed the Dewey Square area. Across the Square is 125 Summer Street, a \$165 million project completed in 1989. Just beyond are two of Boston's largest new projects: 125 High Street, a 1.3 million square foot office building and International Place, a complex of five buildings totaling 1.7 million square feet. Combined, these latter two projects represent \$820 million in new private

investment. Further along the harborfront is Boston's newest signature building -- Rowes Wharf -- a dramatic hotel, condominium, and office project with a grand archway leading to panoramic views of the harbor.

South Station also sits along the edge of Fort Point Channel on the Boston Harbor. Just across Fort Point Channel, plans for a new federal courthouse have just been announced heralding a shift in the legal services sector to this end of downtown.

South Station has superb access to the local and regional transportation network which will improve further when major new infrastructure projects are completed. The parcel will soon have direct access to Logan Airport upon the 1995 completion of the Third Harbor Tunnel and Seaport Access Road. In addition, the site will be directly accessible to the Central Artery and the Massachusetts Turnpike.

When can the South Station Redevelopment Project go forward?

- o **Zoning.** The South Station Redevelopment Project can commence immediately. As the city's planning agency, the BRA is responsible for land use planning and in this capacity processed zoning for South Station which completely allows and encourages the program outlined above. This zoning is contained in Article 40 of the Boston Zoning Code which was adopted in September 1989.

- o **Environmental Review.** With respect to environmental approvals required from the Commonwealth of Massachusetts, the BRA is currently preparing notification documents so that the project will comply with the regulations of the Massachusetts Environmental Protection Act (MEPA), and yet be able to proceed on an accelerated schedule. The BRA is seeking waivers from certain project filings required by MEPA with respect to the planned parking garage and the bio-medical research buildings. Such waivers will substantially reduce the scope of the overall environmental review process, and will help to fast-track the project's approvals.

Who is involved in the South Station Redevelopment Project?

- o **the Boston Redevelopment Authority.** South Station air-rights area is owned by the Boston Redevelopment Authority, the city's planning and redevelopment agency which is charged with selecting its redeveloper. The area which the BRA has made available for redevelopment consists of air-rights or the right to build over the railroad tracks which back onto the historic Headhouse. This site area is 252,000 square feet. The BRA retained the air-rights when it conveyed the underlying title to the railroad tracks in 1979.
- o **the Massachusetts Bay Transportation Authority.** In October 1979, the BRA and the MBTA executed a purchase and sale agreement in which the BRA conveyed title of the land on which the train tracks sit and limited air rights to

the MBTA for the development of the Bus Terminal and MBTA portion of the parking garage.

- o **Tufts University Development Corporation.** TUDC is a for-profit entity established by Tufts University to carry out its real estate development goals. The BRA selected TUDC as the developer for the air-rights in May 1990 after a national competition. Tufts ranks among the top 1.5% among the nation's more than 3,000 colleges and universities in the number of research grants it receives. TUDC is currently seeking a co-developer for the air-rights.
- o **the Beacon Companies.** Beacon successfully completed and now manages the South Station Headhouse under a 35-year lease and management contract with the MBTA. The MBTA originally acquired the Headhouse from the BRA. Beacon is known for its success in high-quality, complex projects in Boston such as Rowes Wharf, 75 State Street, Post Office Square Tower and Meridien Hotel, as well as the Post Office Square Park and Garage, and Center Plaza. Beacon is not currently involved in any other portion of the South Station Redevelopment Project.

Project Schedule

Planning/Design/Construction Schedule	<u>Completion</u>
A. TUDC Designation Agreement with BRA on Air Rights Master Plan	October, 1991
B. Agreement on Developer Selection (BRA/TUDC)	October, 1991
C. Agreement between TUDC and Developer	October 1991
D. Agreement between Development Team and MBTA	October 1991
E. Approval of Development Plan	December 1991
F. Construction Begins	
o Bus Station and Parking Garage	June 1992
o TUDC Labs	December 1994
G. Facility Completed	
o Bus Station and Garage	December 1994
o TUDC Labs	December 1996

**SOUTH STATION AIR RIGHTS
DEVELOPMENT PROGRAM**

MBTA Bus Facility	125,000 s.f.	To be constructed at the southern end of the site above the railroad tracks
MBTA Parking	200 spaces	To be constructed in conjunction with bus facility
Public Parking	1,100 spaces	To be constructed on Air Rights across entire site
Research Buildings 1 and 2	350,000 s.f.	To be developed in two buildings, 8 stories in height, at southern end of site
Buildings 3 & 4	650,000 s.f.	To be developed in two buildings to the south of the office tower, encompassing a variety of uses
Office Tower	1,000,000 s.f.	To be developed in a 500 foot tower located behind the historic Headhouse

PARKING GARAGE MARKET ANALYSIS

A 1,100 space public parking garage at the South Station Technopolis will have direct off-ramp access from the Massachusetts Turnpike, and will be one block from the Central Artery. At the same time, it is located within a ten-minute walk of every location in Boston's Financial District. The garage will serve a number of markets, meeting both short term and long term demand.

First, it will help to replace the thousands of parking spaces in the surrounding area being lost over the next few years to the Artery/Tunnel Project and other construction. Second, a parking garage at South Station would be very attractive to workers in nearby office buildings which have inadequate parking of their own, including both recently-built towers and many older structures that lack indoor parking entirely. Third, the parking garage will serve the needs of later phases of the South Station Technopolis development program.

Impacts of Artery/Tunnel and Other Projects

The South Station Garage will help to replace an estimated 5,200 parking spaces in the surrounding area being lost permanently or temporarily over the next few years to the Artery/Tunnel Project and other construction (see Table 1). At the same time, during the Artery construction period commuters currently using parking in the heart of downtown and across the Fort Point Channel will be searching for easier-to-reach alternatives on the southern edge of the Financial District, close to the major highways. No site is better located for this purpose than South Station.

Table 1

Projected Loss of Parking Spaces in South Station Area,* 1991-2001

Cause of Parking Loss Year Taken Spaces Lost

Permanent Loss**Central Artery/Tunnel Project**

Edison	1992, 94 ~	272
City-Owned Lots	varies	91
Wang	1992	88
Postal Service	1995	275
Other South Boston	1996	57

Northern Avenue Relocation

McCourt Lot	1991	600
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U.S. Courthouse

Fan Pier Lot	1993	800
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One Lincoln Street Office Tower

Kingston/Bedford Garage	1994	760
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<i>Permanent Spaces Lost</i>		2943
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Temporary Loss**Central Artery/Tunnel Project**

Local Streets (2-10 yrs)	varies	195
Boston Wharf (4 yrs)	1996	955
Postal Service (4 yrs)	1995	760
Other South Boston (2-3 yrs)	1994, 96	385

<i>Temporary Spaces Lost</i>		2295
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Total Spaces Lost		5238
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Notes:

* South Station Area defined as one half mile radius from Headhouse.

~ Year of taking for Artery/Tunnel Project assumes 1992 construction start.

' Kingston-Bedford Garage has 760 total spaces, but only 45 currently are available. This taking does represent the permanent loss of 760 potential competitive spaces near South Station.

Sources:

Central Artery/Tunnel Project FSEIR; Boston Transportation Department; BRA estimates.

The Artery/Tunnel Project estimates that its land taking will result in the permanent removal of 3,500 parking spaces, 783 of them in the South Station area, and the temporary removal of an additional 2,261 spaces a year on average during the construction period. In the fifth year of the project, nearly 7,000 of the approximately 18,000 parking spaces now in the project area will be displaced, with 3,078 of them serving the area within a one-half mile radius of South Station.

Added to this sum are over 2,000 other parking spaces being permanently displaced by three construction projects within this same area over the next few years. As described in the Table, the relocation of Northern Avenue across one major parking lot in the Fort Point Channel area, the construction of a new Federal Courthouse on another lot, and the demolition of the Kingston-Bedford garage for a major office project-- in addition to the Artery Project-- will take an estimated 2,943 spaces permanently out of the South Station area.

The total loss, then, will be an estimated 5,238 spaces within one-half mile of South Station. However, the Artery/Tunnel Project will not build any replacement parking in this area, which encompasses virtually all of Boston's Financial district, with 26.6 million square feet of office space and approximately 135,000 workers.

South Station is the ideal location for replacement parking on the southern side of the Financial District, because of its superior access to regional highways. The Artery/Tunnel and other construction projects will not only cause the direct loss of

parking spaces, but will make thousands more spaces difficult to reach, both in the Financial District and in the Fort Point Channel area. Commuters using the Massachusetts Turnpike and the Southeast Expressway will be seeking routes to avoid local streets and the Central Artery during the construction period. A garage at South Station would allow them to avoid this congestion, since its entrance will be located directly off the first downtown exit and entrance ramps of these highways.

Finally, when the new Third Harbor Tunnel connecting the Massachusetts Turnpike to Logan Airport is completed in 1995, the South Station parking garage also will have the best airport access of any parking facility in downtown Boston.

Parking for Nearby Office Buildings

A second market for a parking garage at South Station would be workers in adjacent office buildings which have inadequate or no parking of their own. Several of the largest buildings with internal parking in the South Station area have less than one-quarter of a parking space per 1000 square feet of rentable office space, and several other buildings have no internal parking at all.

Tables 2 and 3 analyze the present Financial District parking garages, both those attached to office towers and independent garages. Table 2 shows the number of garage spaces available to the public or to building tenants only, along with daily and monthly parking rates. There are 16,780 garage spaces in or near the financial district serving the office market, less than 7,000 of them inside office towers. The median

Table 2

Boston Financial District Parking Garages and Rates, 1991

Location	Total Rentable Square Feet	Total Parking Spaces	Daily Rate	Monthly Rate	Open to Public
<i>Office Buildings With On-Site Parking</i>					
125 High Street	1,390,600	850	\$20.00	\$275.00	yes
100 Federal Street	1,355,610	174			no
One Financial Center	1,108,000	250	\$18.00	\$240.00	no
One Federal Street	1,103,000	240	\$25.00	\$265.00	yes
One Beacon Street	1,100,000	150	\$13.75	\$285.00	yes
Federal Reserve Plaza	1,100,000	188		\$275.00	no
Exchange Place	1,095,000	94		\$275.00	yes
International Place I	1,025,000	420	\$20.00	\$290.00	yes
60 State Street	823,014	227		\$325.00	no
One Post Office Square	760,000	365	\$24.00	\$290.00	yes
International Place II	750,000	335		Open 1992	
99 High Street	728,110	150	\$16.00	\$275.00	yes
75 State Street	598,000	700	\$24.00	\$275.00	daily only
One, Two, Three Center Plaza	576,202	575	\$18.00	\$275.00	yes
150 Federal Street	528,000	260	\$14.00	\$260.00	yes
101 Federal Street	483,000	195	\$18.00	\$275.00	yes
125 Summer Street	473,500	292		\$290.00	no
Marketplace Center	360,000	120	\$16.00	\$275.00	yes
260 Franklin Street	352,870	92		\$275.00	no
160 Federal Street	350,000	100	\$14.00	\$260.00	yes
101 Arch Street	340,000	40	\$15.00	\$285.00	yes
Rowes Wharf	330,000	500	\$18.00	\$280.00	yes
265 Franklin Street	322,000	128	\$13.00	\$250.00	yes
99 Summer Street	233,000	150	\$13.00	\$260.00	daily only
745 Atlantic Ave	168,457	150		\$250.00	yes
2 Devonshire Place	138,000	143	\$19.00	\$250.00	daily only
<i>Subtotal: Office Building Garages</i>	<i>17,591,363</i>	<i>6,888</i>	<i>\$18.00</i>	<i>\$275.00</i>	
<i>Independent Parking Garages</i>					
Beach Street		350	\$12.00	\$250.00	yes
Dock Square		602	\$13.00	\$275.00	yes
Government Center *		1,865	\$10.50	\$175.00	yes
Harbor Towers		1,500	\$18.00	\$265.00	yes
Lafayette Place		1,270	\$13.00	\$260.00	yes
Pi Alley		600	\$13.75	\$285.00	yes
Post Office Square		1,400	\$18.00	\$275.00	yes
Province Street		300	\$13.00	\$225.00	yes
Winthrop Square		1,125	\$5.25		yes
Woolworth		880	\$16.00	\$225.00	yes
<i>Subtotal: Independent Parking Garages</i>		<i>9,892</i>	<i>\$13.00</i>	<i>\$260.00</i>	
Total / Median	17,591,363	16,780	\$18.00	\$275.00	

Note: * Government Center Garage is located one-quarter mile north of the Financial District's northern edge, over half a mile from South Station.

Sources: Boston Transportation Department Parking Data; New England Real Estate News, Dec. 1989; Inventory of Off-Street Parking Facilities Within Boston Proper, April 1981; Friends of Post Office Square; and BRA Survey.

rates in office tower garages are \$18 daily and \$275 monthly; the corresponding rates for freestanding garages are \$13 and \$260.

Table 3 calculates the ratios of parking spaces per 1,000 square feet of rentable Class A office space for individual towers with parking and for the Financial District as a whole. Several of the buildings adjacent to South Station, such as One Financial Center, 99 High Street and Federal Reserve Plaza, have ratios below one-quarter of a space per 1,000 square feet. The buildings with on-site parking as a whole have a ratio of 0.39 spaces per 1,000 square feet. Adding the parking spaces in independent garages, and the square footage of Class A buildings without any parking at all, results in a ratio of 0.61 spaces per 1,000 square feet. Calculating the same ratio only for presently occupied Class A space gives a figure of 0.73 spaces per 1,000 square feet.

Even with a downtown office workforce that relies heavily on public transportation and walking to work, these are low parking ratios.

Many of these commuters park in large open lots across the Fort Point Channel, or in large independent garages. But the Fort Point lots will be taken permanently or for a number of years by construction of the new Federal Courthouse, the Third Harbor Tunnel and a new Northern Avenue. The independent garages include the Kingston-Bedford Garage, which will be torn down for the One Lincoln Street office project.

Table 3

Boston Financial District Parking, Ratio of Spaces to Office Square Feet

<u>Project Name</u>	<u>Total Rentable Square Feet</u>	<u>Total Parking Spaces</u>	<u>Total Parking Ratio*</u>
<i>Class A Buildings With On-Site Parking</i>			
125 High Street	1,390,600	850	0.61
100 Federal Street	1,355,610	174	0.13
One Financial Center	1,108,000	250	0.23
One Federal Street	1,103,000	240	0.22
One Beacon Street	1,100,000	150	0.14
Federal Reserve Plaza	1,100,000	188	0.17
Exchange Place	1,095,000	94	0.09
International Place I	1,025,000	420	0.41
60 State Street	823,014	227	0.28
One Post Office Square	760,000	365	0.48
International Place II	750,000	335	0.45
99 High Street	728,110	150	0.21
75 State Street	598,000	700	1.17
One, Two, Three Center Plaza	576,202	575	1.00
150 Federal Street	528,000	260	0.49
101 Federal Street	483,000	195	0.40
125 Summer Street	473,500	292	0.62
Marketplace Center	360,000	120	0.33
260 Franklin Street	352,870	92	0.26
160 Federal Street	350,000	100	0.29
101 Arch Street	340,000	40	0.12
Rowes Wharf	330,000	500	1.52
265 Franklin Street	322,000	128	0.40
99 Summer Street	233,000	150	0.64
745 Atlantic Ave	168,457	150	0.89
2 Devonshire Place	138,000	143	1.04
<i>Subtotal: Buildings with Parking</i>	<i>17,591,363</i>	<i>6,888</i>	<i>0.39</i>
<i>Class A Buildings without Parking</i>	<i>9,825,149</i>		
<i>Independent Parking Garages</i>		<i>9,892</i>	
<i>Ratio Analysis For:</i>			
Total Class A Square Feet	27,416,512	16,780	0.61
Class A Square Feet Now Occupied	22,990,869	16,780	0.73

Note: Total Parking Ratio* - number of parking spaces per 1,000 rentable square feet.

Sources: Boston Transportation Department Parking Data; New England Real Estate News, Dec. 1989, Inventory of Off-Street Parking Facilities Within Boston Proper, April 1981; Friends of Post Office Square; and BRA Survey.

Serving the South Station Technopolis

The parking garage's third market is to serve the needs of later phases of the South Station Technopolis development program, such as the 350,000 square feet of laboratory and research space and 1,400,000 square feet of office space allowable on the site. The 1,100 spaces would accommodate 0.5 parking spaces per 1000 square feet of research space, and 0.66 spaces per 1000 feet of office space.

Since a research facility generally contains about 450 square feet of space per worker, or just over two workers per 1000 square feet, a parking ratio of 0.5 per 1000 square feet would accommodate virtually every research worker who commutes by car. At the same time, the office parking ratio would be among the top half-dozen of all Financial District office buildings.

SOUTH STATION AIR RIGHTS DEVELOPMENT PARKING GARAGE COST SUMMARY AND OPERATING PRO FORMA

The parking garage is projected to contain 1,100 public parking spaces. Acquisition of air-rights is carried at \$3,100/space. The hard cost is carried at \$14,000/space plus a premium for additional load-bearing structure for future development of \$909/space. Together with soft costs, financing costs, etc., total development cost is estimated at \$25.4 million, or \$23,101/space.

The garage income is derived from monthly (70%) and transient (25%) use. Both types are assumed to stabilize in six months. A 5% overall vacancy factor is applied following stabilization. Monthly parking rates begin at \$225/month, 82% of the rate currently charged in the Post Office Square Garage in the Financial District, and as low as any garage in the Financial District (see Table 2). Transient spaces are assumed to earn on average \$12.86/day based and on a \$12 average ticket on weekdays with 1.3 turns/day, and a \$6.00 average ticket on weekends with 1.0 turns/day. Operating expenses are carried at \$400/space/year, and real estate taxes are carried at \$250/space/year. Income and expenses escalate at 4% per year.

Using 1.15 debt coverage and 7.5% cost of capital (tax-exempt bond rate), unleveraged return is projected at 10.9% and before tax cash flow is projected at \$360,000 (\$327/space) in the first stabilized year.

PARKING GARAGE DEVELOPMENT PROGRAM

PARKING CAPACITY: 1,100 SPACES
PUBLIC PARKING: 1,100 SPACES

AREA/PARKING SPACE: 350 GSF
TOTAL GARAGE AREA: 385,000 GSF
MECHANICALLY VENTILATED? NO
CONSTRUCTION PERIOD: 18 MONTHS

PARKING GARAGE DEVELOPMENT PRO FORMA

ACQUISITION	\$3,100 /SPACE	3,410,000	
HARD COST	\$40.00 /GSF	15,400,000	\$14,000 /SPACE
STRUCTURAL PREMIUM	\$909.09 /SPACE	1,000,000	BEARING CAPACITY FOR FUTURE DEVELOPMENT
DESIGN FEES	6.0% OF HARD	924,000	
ACCOUNTING/LEGAL FEES	3.5% OF HARD	539,000	
LINKAGE FEES	\$0.00 /GSF	0	NO LINKAGE ON PUBLIC PARKING
MARKETING	0.5% OF HARD	77,000	
DEVELOPERS FEE	3.0% OF HARD	462,000	
FINANCING FEES	2.5% OF LOAN	635,278	CALCULATED ON CONSTRUCTION LOAN AMOUNT
CONSTRUCTION INTEREST	7.50%	1,429,376	50% AVERAGE DRAW
RENT-UP DEFICIT	\$274.97 /SPACE	302,472	FROM OPERATING PRO FORMA
CONTINGENCY	8.0% OF HARD	1,232,000	
TOTAL DEVELOPMENT COST		\$25,411,127	
TOTAL DEVELOPMENT COST/SPACE		\$23,101	

PARKING GARAGE CAPITAL STRUCTURE

STABILIZED NOI	2,760,717	YEAR 2
DEBT COVERAGE RATIO	1.15	
DEBT SERVICE	2,400,624	
INTEREST RATE	7.50%	
LOAN TERM	30	
LOAN AMOUNT	25,411,127	100.0% OF TDC
EXCESS DEBT CAPACITY AVAILABLE	3,199,831	
EQUITY REQUIRED	0	0.0% OF TDC
CAPITALIZATION RATE	9.0%	
VALUE IN STABILIZED YEAR	31,901,620	BASED ON YEAR 3 NOI
LOAN/VALUE RATIO	79.7%	USING CAPPED VALUE
UNLEVERAGED RETURN (ROTDC)	10.9%	YEAR 2
LEVERAGED RETURN (ROE)	0.0%	YEAR 2, 0% IF NO EQUITY REQUIRED
BEFORE TAX CASH FLOW	360,094	YEAR 2
BEFORE TAX CASH FLOW/SPACE	\$327.36	

10-YEAR OPERATING PRO FORMA

SOUTH STATION PARKING GARAGE

1,100 PUBLIC SPACES

YEAR	1	2	3	4	5	6	7	8	9	10
% SPACES MONTHLY	52.5%	70.0%	70.0%	70.0%	70.0%	70.0%	70.0%	70.0%	70.0%	70.0%
% SPACES TRANSIENT	18.8%	25.0%	25.0%	25.0%	25.0%	25.0%	25.0%	25.0%	25.0%	25.0%
% VACANT	28.8%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%
MONTHLY RATE	\$225.00	\$234.00	\$243.36	\$253.09	\$263.22	\$273.75	\$284.70	\$296.08	\$307.93	\$320.25
DAILY TRANSIENT INCOME	\$12.86	\$13.37	\$13.91	\$14.46	\$15.04	\$15.64	\$16.27	\$16.92	\$17.60	\$18.30
EFFECTIVE PARKING INCOME	2,527,152	3,504,317	3,644,490	3,790,269	3,941,880	4,099,555	4,263,538	4,434,079	4,611,442	4,795,900
OPERATING EXPENSES/SPACE	\$400.00	\$416.00	\$432.64	\$449.95	\$467.94	\$486.66	\$506.13	\$526.37	\$547.43	\$569.32
REAL ESTATE TAX/SPACE	\$250.00	\$260.00	\$270.40	\$281.22	\$292.46	\$304.16	\$316.33	\$328.98	\$342.14	\$355.83
TOTAL EXPENSES	429,000	743,600	773,344	804,278	836,449	869,907	904,703	940,891	978,527	1,017,668
NET OPERATING INCOME	2,098,152	2,760,717	2,871,146	2,985,992	3,105,431	3,229,649	3,358,835	3,493,188	3,632,915	3,778,232
DCR	0.87	1.15	1.20	1.24	1.29	1.35	1.40	1.46	1.51	1.57
DEBT SERVICE	2,400,624	2,400,624	2,400,624	2,400,624	2,400,624	2,400,624	2,400,624	2,400,624	2,400,624	2,400,624
NET CASH FLOW	(302,472)	360,094	470,522	585,368	704,808	829,025	958,211	1,092,564	1,232,292	1,377,608
YEARLY INCOME ESCALATION		4.00%								
YEARLY EXPENSE ESCALATION		4.00%								

SOUTH STATION AIR RIGHTS DEVELOPMENT LABORATORY COST SUMMARY AND OPERATING PRO FORMA

The laboratory building consists of 350,000 gross square feet of space, of which 90% is devoted to laboratory use and 10% to related office use. Net to gross efficiencies are 75% and 85%, respectively. Acquisition of air-rights is carried at \$6.00/GSF. Using a base building cost of \$100/GSF, total development cost is estimated at \$54.9 million (\$157/GSF), exclusive of tenant improvements which will be performed at tenant's expense.

The lab space and related office space initially leases at \$22/NSF triple net and stabilizes in three years. A 5% vacancy factor is carried throughout; rent increases occur every 5 years with no additional vacancy assumed due to turnover. This lease rate is the same as rents at the Olmsted Plaza development, where the Beth Israel and Brigham and Women's Hospitals have signed leases for 300,000 square feet of research space.

The unleveraged return is projected at 10.2% in the first stabilized year. Using 1.2 debt coverage, a 7.5% cost of capital (tax-exempt bond rate), the project's stabilized NOI is sufficient to fund the total development cost and a debt reserve fund of approximately \$490,000. With this type of financing, the lab space would generate a substantial cash flow after debt service (approximately \$930,000 in the first stabilized year).

LABORATORY BUILDING

TOTAL SQUARE FOOTAGE:	350,000 GSF	
OFFICE SPACE	35,000 GSF	10.0%
LABORATORY SPACE	315,000 GSF	90.0%
OFFICE EFFICIENCY	85.0%	
LAB EFFICIENCY	75.0%	
LEASABLE OFFICE SPACE	29,750 NSF	
LEASABLE LAB SPACE	236,250 NSF	
CONSTRUCTION PERIOD	18 MONTHS	

LABORATORY BUILDING DEVELOPMENT PRO FORMA

ACQUISITION	\$6.00 /GSF	2,100,000	
HARD COST	\$100.00 /GSF	35,000,000	
STRUCTURAL PREMIUM	\$0.00 /GSF	0	
TENANT IMPROVEMENTS	BY TENANT		
DESIGN FEES	6.0% OF HARD	2,100,000	
ACCOUNTING/LEGAL FEES	3.5% OF HARD	1,225,000	
LINKAGE FEES	\$4.93 /GSF	1,232,500	PV OF HSG + JOBS @ 8.5%, 100K SF
MARKETING/BROKERAGE	\$4.5 OF HARD	1,197,000	
DEVELOPERS FEE	3.0% OF HARD	1,050,000	
FINANCING FEES	2.5% OF LOAN	1,342,213	CALCULATED ON CONSTRUCTION LOAN
CONSTRUCTION INTEREST	7.25%	2,919,313	50% AVERAGE DRAW
RENT-UP DEFICIT	\$10.23 /NSF	2,722,492	FROM OPERATING PRO FORMA
CONTINGENCY	8.0% OF HARD	2,800,000	
TOTAL DEVELOPMENT COST		\$53,688,518	
TOTAL DEVELOPMENT COST/GSF		\$153	
TOTAL DEVELOPMENT COST/NSF		\$202	

LAB BUILDING CAPITAL STRUCTURE

STABILIZED NOI	5,581,191	YEAR 3
DEBT COVERAGE RATIO	1.20	
DEBT SERVICE	4,650,992	
INTEREST RATE	7.25%	
LOAN TERM	30	
LOAN AMOUNT	53,688,518	100.0% OF TDC
EXCESS DEBT CAPACITY AVAILABLE	3,127,102	BASED ON DCR AND 100% OF TDC
EQUITY REQUIRED	0	0.0% OF TDC
CAPITALIZATION RATE	9.0%	
VALUE IN STABILIZED YEAR	62,013,230	BASED ON YEAR 4 NOI
LOAN/VALUE RATIO	86.6%	USING CAPPED VALUE
UNLEVERAGED RETURN (ROTDC)	10.4%	YEAR 3
LEVERAGED RETURN (ROE)	0.0%	YEAR 3, 0% IF NO EQUITY REQUIRED
BEFORE TAX CASH FLOW	930,198	YEAR 3

10-YEAR OPERATING PRO FORMA

SOUTH STATION LAB BUILDING

YEAR	1	2	3	4	5	6	7	8	9	10
OFFICE VACANCY	50.0%	15.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%
LAB VACANCY	50.0%	15.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%
OFFICE RENTAL RATE	\$22.00	\$22.88	\$23.80	\$24.75	\$25.74	\$26.77	\$27.84	\$28.95	\$30.11	\$31.31
LAB RENTAL RATE	\$22.00	\$22.88	\$23.80	\$24.75	\$25.74	\$26.77	\$27.84	\$28.95	\$30.11	\$31.31
TOTAL EFFECTIVE INCOME	2,926,000	5,056,128	5,689,080	5,689,080	5,689,080	6,323,007	6,784,505	6,921,636	6,921,636	6,921,636
OPERATING EXPENSES/NSF	\$4.00	\$4.16	\$4.33	\$4.50	\$4.68	\$4.87	\$5.06	\$5.26	\$5.47	\$5.69
REAL ESTATE TAX/NSF	\$3.50	\$3.64	\$3.79	\$3.94	\$4.09	\$4.26	\$4.43	\$4.61	\$4.79	\$4.98
TOTAL EXPENSES (1)	997,500	311,220	107,890	112,205	116,693	121,361	126,216	131,264	136,515	141,975
NET OPERATING INCOME	1,928,500	4,744,908	5,581,191	5,576,875	5,572,387	6,201,646	6,658,290	6,790,372	6,785,121	6,779,661
DCR	0.41	1.02	1.20	1.20	1.20	1.33	1.43	1.46	1.46	1.46
DEBT SERVICE	4,650,992	4,650,992	4,650,992	4,650,992	4,650,992	4,650,992	4,650,992	4,650,992	4,650,992	4,650,992
NET CASH FLOW	(2,722,492)	93,916	930,198	925,883	921,395	1,550,653	2,007,297	2,139,380	2,134,129	2,128,668

YEARLY INCOME ESCALATION

4.00%

YEARLY EXPENSE ESCALATION

4.00%

(1) ALL LEASES TRIPLE NET; EXPENSES ON VACANT SPACE ONLY.

(2) ALL LEASE INCOME ESCALATES AT FIVE-YEAR INTERVALS.

The Boston Redevelopment Authority

The Boston Redevelopment Authority

The Boston Redevelopment Authority is prepared to work closely with the co-developers of the South Station Redevelopment Project to assist with such matters as financing, public approvals, tenancy, and construction schedule in order to ensure the success of the project. Since its establishment in 1957, the Boston Redevelopment Authority has initiated and managed many complex redevelopment efforts which have involved ground-breaking legal and zoning concepts, complex financial structurings, state-of-the-art construction, and sophisticated development partnerships. Some of the private projects which have required significant BRA involvement to initiate and bring to fruition are described below.

Rowes Wharf. In 1982, the BRA assembled two decaying wharves on Boston Harbor, the Rowes and Fosters Wharves, for a visionary redevelopment project which today defines the Boston waterfront. The parcel was made available for development through a Request for Proposals which contained detailed urban design guidelines which would govern the redevelopment of the site. These guidelines specified that the project should contain a publicly-accessible edge on the waterfront, a relatively new concept at the time for what was planned as a private residential, hotel, and office development. In addition, a boat terminal for public water transit was also provided, with shuttle service to Logan Airport. The BRA worked with the selected developer, the Beacon Companies, throughout the development process and in particular to refine the Skidmore, Owings, and Merrill design submission. The project features a

below-water parking garage, the first of its kind in Boston. Today Rowes Wharf is often featured as the symbol of Boston and its successful waterfront redevelopment efforts.

The Charlestown Navy Yard. Similarly, the BRA-owned Charlestown Navy Yard, a former naval shipyard for 174 years, is being redeveloped under BRA auspices. Acquired in 1978, a 105-acre portion of the Charlestown Navy Yard has undergone an extensive program of rehabilitation and redevelopment which continues today. This former naval shipyard now contains more than 2,000,000 square feet of class A office space, retail shops, housing at all income levels, and medical research facilities, with plans underway for a hotel, a new state-of-the-art Aquarium, and additional biomedical research space totaling another 2,000,000 square feet.

Since 1978 and 1989, over \$470 million in private funds have been invested in the Navy Yard, which is expected to grow with an anticipated new investment of over \$800 million from 1991 through 2000. Nearly 2,800 permanent jobs and 2,000 construction jobs have been created in the Navy Yard, and the City now realizes annual tax revenues of over \$4 million.

Over 22 acres of open space including Shipyard Park, the Second Avenue pedestrian mall, and 1.5 miles of Harborwalk, a publicly-accessible harbor edge walkway, have been completed. Other amenities include water shuttle service to downtown, a sailing center, and two day care centers.

The Massachusetts General Hospital (MGH) has already committed its medical research expansion to the Charlestown Navy Yard, establishing a significant tenancy there for 650,000 square feet of its research facilities. Basic research and clinical research take place within the Navy Yard complex. In 1987, the Massachusetts General Hospital Research Center was opened in Building 149. The presence of the planned New England Aquarium, with the added aspect of marine-related education and research, will further define the Navy Yard as a base for an even wider scope of research and development.

The financing of the MGH Research Center, which includes a 1,350 car parking garage, required sophisticated expertise on the BRA's part. The BRA is lessor on an 80 year ground lease of the premises. To structure the transaction, the BRA first permitted the assignment of the original ground lessee's interest in the premises to the Massachusetts Industrial Finance Agency (MIFA). MIFA issued more than \$250,000,000 in tax-exempt bonds for the acquisition of the ground lease interests and tenant improvements, and in turn transferred its interest to Massachusetts Biotechnical Research Corporation (MBRC), established as obligor on the bonds. Entities related to MGH there upon subleased the premises from MBRC, with MGH guaranteeing the bond payments. At the end of the bonds' term, MGH will become the Ground Lessee.

The BRA recently produced an Environmental Impact Report for filing with the State of Massachusetts under the Massachusetts Environmental Protection Act which

describes all of the proposed projects planned for development in the Navy Yard. Because of the BRA's expertise in this area, the preparation of this document will speed the development review process as individual private development entities seek environmental approvals.

Post Office Square Park and Garage. Post Office Square Park and Garage is another signature project for which the BRA laid the groundwork for the private market. The project is a seven-level, underground parking structure topped off by a luxurious new 1.7-acre public park at street level located in the heart of the Financial District.

The project was developed through the formation of a public/private venture between the City of Boston and the non-profit corporation known as Friends of Post Office Square, Inc. The BRA organized a group of businesses and property owners surrounding the area to form a special type of urban redevelopment corporation under a Massachusetts Law known as Chapter 121A. Chapter 121A projects provide for payments in lieu of taxes to encourage and stimulate development. The Friends is made up of 20 Boston firms and individuals who together contributed \$1 million to launch the project. All proceeds from the garage development go to the City and its Park Trust Fund for the maintenance of the city's parks.

The development of this unique process was guided throughout by a development agreement between the City of Boston, the BRA, and the Friends, which provided

public oversight of the financing, operation, design, maintenance and orderly development of the project. Among the steps necessary to complete the project which the BRA oversaw were: the demolition of an existing dilapidated parking structure; the approval of a financing plan which provided funding for the project including debt in the amount of a \$51 million bullet loan, and equity in the amount of \$29 million obtained through the issuance of preferred stock carrying a dividend and also rights to monthly parking privileges; participation in a design competition for the park which involved the selection of a park review committee and final approval of the selected designer; and the securing of all necessary zoning approvals.

This new park is filled with specimen trees from the Arnold Arboretum, two fountains, a trellis, two small kiosk structures, one housing the escalators to the garage and the other a cafe, and dozens of tables and chairs, as well as seating for up to 1000 people on benches and walls, and a flower stand. This new park is currently undergoing its finishing touches, but has already become a national model.

Tufts University Development Corporation

Tufts University, through its newly formed Tufts University Development Corporation (TUDC), is creating a center for basic and applied biomedical research for the pharmaceutical, biotechnology, and related biomedical industries that will revolutionize research and product development.

The diverse and internationally recognized biomedical researchers and facilities located in Boston, Massachusetts, have made Boston a mecca for scientists from around the globe. TUDC can provide a new complex for the expansion of the facilities needed to house this research work and the scientists undertaking it.

TUDC, in collaboration with Tufts University, which is renowned for its contributions to the expanding frontiers of biomedical science, is establishing the Tufts International Research Center in the heart of this thriving scholarly, corporate, and research community, thereby creating a new critical mass of research scientists and minds. Boston Mayor Raymond Flynn's recent initiative for the development of a technopolis concept in the city has added impetus for the Tufts Research Center.

Through the research center, a select number of corporations will join Tufts in one of the most elite academic, corporate, and research centers in the world for pharmaceutical, research, biotechnology, and related biomedical research.

Corporations that join Tufts International Research Center will have access to all Tufts University facilities, including its affiliated teaching hospitals, its inter-institutional electronic library, and its teaching programs. Appropriate faculty consultation and/or research program contractual relationships may be arranged, and graduate students may be available for research work in an atmosphere of cooperative collegiality. Tufts will, where appropriate, tailor faculty appointments and consultancies for corporate members' research scientists.

The research center, a place where the products of the next century will be born, will transcend cultures and the traditional boundaries between academic research and corporate development to create an environment that is mutually beneficial to both scholarship and business. The research center is uniquely suited to a city that is already a global leader in pharmaceutical and health sciences research.

Tufts' new center will become an integral part of its existing health sciences research/teaching complex which is composed of Tufts' nationally renowned schools of medicine, dental medicine, veterinary medicine, nutrition, and biomedical sciences. Tufts Center for the Study of Drug Development is representative of the excellence of Tufts' many research centers.

"During my 30 years as a biomedical scientist, I have acted as director and consultant for a number of biomedical and pharmaceutical companies. I have found that when companies and research institutions

are in close proximity, there is great benefit on both sides. Direct collaboration among basic scientists, clinicians, and industrial scientists has proven to be a most efficient and profitable arrangement. The Tufts research center will provide this atmosphere, located in the heart of Boston next to Tufts' schools of biomedical science, medicine, as well as Tufts' USDA Human Nutrition Research Center on Aging and some of the finest hospitals in the world".

Jean Mayer, President
Tufts University

Jean Mayer, President, Tufts University, A Biographical Sketch

Jean Mayer was born in Paris, February 19, 1920, the son of the physiologist Andre Mayer. He did his undergraduate studies at the University of Paris, receiving a B. Litt. summa cum laude, a B.Sc. magna cum laude, and several of the highest scholastic awards in France including the First (Honor) Prize of French colleges. He was a Fellow of the Ecole Normale Superieur.

At Yale University, he was awarded a Ph.D. in physiological chemistry in 1948, and at the Sorbonne, he was awarded a D.Sc. in physiology summa cum laude in 1950.

In 1950, he joined the faculty of Harvard University; he was a professor of nutrition, lecturer on the history of public health, member of the Center for Population Studies, and master of Dudley House. In July 1976, he became the tenth president of Tufts University.

Dr. Mayer has served as a member of the Nutrition Division of the Food and Agriculture Organization of the United Nations (FAO), as a consultant to FAO, the World Health Organization (WHO), and the United Nations Children's Fund (UNICEF), and in technical missions on various continents. He led a technical mission to wartime Biafra in 1969. He was a member of the Protein Advisory Group of the United Nations System and headed the United Nations Task Force on Child Nutrition. As the

chairman of the National Council on Hunger and Malnutrition, he had a major role in calling the nation's attention to the nutritional problems of the poor in America.

In 1969, Dr. Mayer was appointed special consultant to the President, entrusted with directing the organization of the First White House Conference on Food, Nutrition and Health, which he chaired. He has since served as chairman of the Nutrition Division of the White House Conference on Aging, as a member of the President's Consumer Advisory Council, and chairman of its Health Committee. He was chairman of the National Nutrition Policy Conference held at the United States Senate in Washington, D.C., June 1974. He served as vice chairman and acting chairman of the Presidential Commission on World Hunger, 1978-1980. On October 16, 1989, Dr. Mayer received the Presidential End Hunger Award in Washington, D.C. He was a member of the Consumer Affairs Advisory Council of the U.S. Department of Energy, 1979-1981, and since 1979 has been a member of the Advisory Committee for Oceans and International Environmental and Scientific Affairs of the U.S. Department of State.

Dr. Mayer has served as a member of the Council of the American Institute of Nutrition, member of the Executive Committee of the Food and Nutrition Board of the National Academy of Sciences, president of the Society of Nutrition Education, and chairman of the Food and Nutrition Section of the American Public Health Association. A Phi Beta Kappa visiting scholar in 1968-1969, he has given a great many endowed and named lectures and has served on the editorial boards of a number of scientific journals. For ten years he was senior warden of King's Chapel in Boston. Past

membership on corporate boards of directors included the board of directors of Monsanto Company from 1970-1988, the board of Miles Laboratories from 1972-1977 and National Intergroup, Incorporated from 1980 to 1990. He is a director of Oppenheimer and Company, Inc., and is or has been a member of the board of a number of foundations including, currently, WGBH Educational Foundation, and the Ridgefield Foundation.

Since 1963, Dr. Mayer has been a Fellow of the American Academy of Arts and Sciences. He is a former member of its council. In June 1976, he was elected a member of the French Academy of Sciences, one of only 28 non-Frenchmen who could then be members at any one time. In 1989 he was elected a foreign member of the National Academy of Medicine of France. He holds 16 honorary degrees from American and foreign universities and has received a number of academic and scientific awards. Among them are the Alvarenga Prize for Medical Research, the Atwater Medal of the U.S. Department of Agriculture, the Poiley Gold Medal for Scientific Research of the New York Academy of Sciences, the Bradford Washburn Award for Popular Science of the Boston Museum of Science, the Bolton L. Corson Medal of the Franklin Institute in Philadelphia, the Conrad A. Elvehjem Award of the American Institute of Nutrition, and the Kohnstamm Prize for chemistry given by Columbia University. Dr. Mayer is a Knight of several orders and a Commandeur de l'Ordre de Deirite of Luxembourg and has received the Golden Door Award of the International Institute of Boston.

SOUTH STATION TECHNOPOLIS: AIR RIGHTS SALE SUMMARY

Option Payment for

Laboratory and

Office Space Rights: \$400,000 for five years

Parking: \$4,000,000 for 1,100 spaces

- o payable in two installments: December 31, 1991 and June 30, 1992

Labs: \$9 per square foot, payable in three equal installments beginning with issuance of building permit

Office Building: Fair market value, established pursuant to appraisal upon a date certain.



100
FEDERAL
STREET

225
FRANKLIN
STREET

FEDERAL
RESERVE

125
HIGH
STREET

ONE
FINANCIAL
PLACE

180
FEDERAL
STREET

99
HIGH
STREET

125
SUMMER
STREET

180
FEDERAL
STREET

99
SUMMER
STREET

SOUTH
STATION
HEAD
HOUSE

STONE &
WEBSTER

RUSSIA
WHARF

745
ATLANTIC
AVENUE

SOUTH
STATION
AIR-RIGHTS

POSTAL
ANNEX



MASSACHUSETTS
HORTICULTURAL
BOTANICAL
GARDEN

South Station Air Right
Development

PROPOSED SURFACE ARTERY
SOUTH STATION AREA

Boston
City Hall

Marriott Hotel

CENTRAL ARTERY
NORTH
2300 PARKING
SPACES LOST

CENTRAL ARTERY
SOUTH
646 PARKING
SPACES LOST

FEDERAL
COURTHOUSE
800 SPACES
LOST

**NORTHERN
AVENUE
RELOCATION
600 SPACES
LOST**

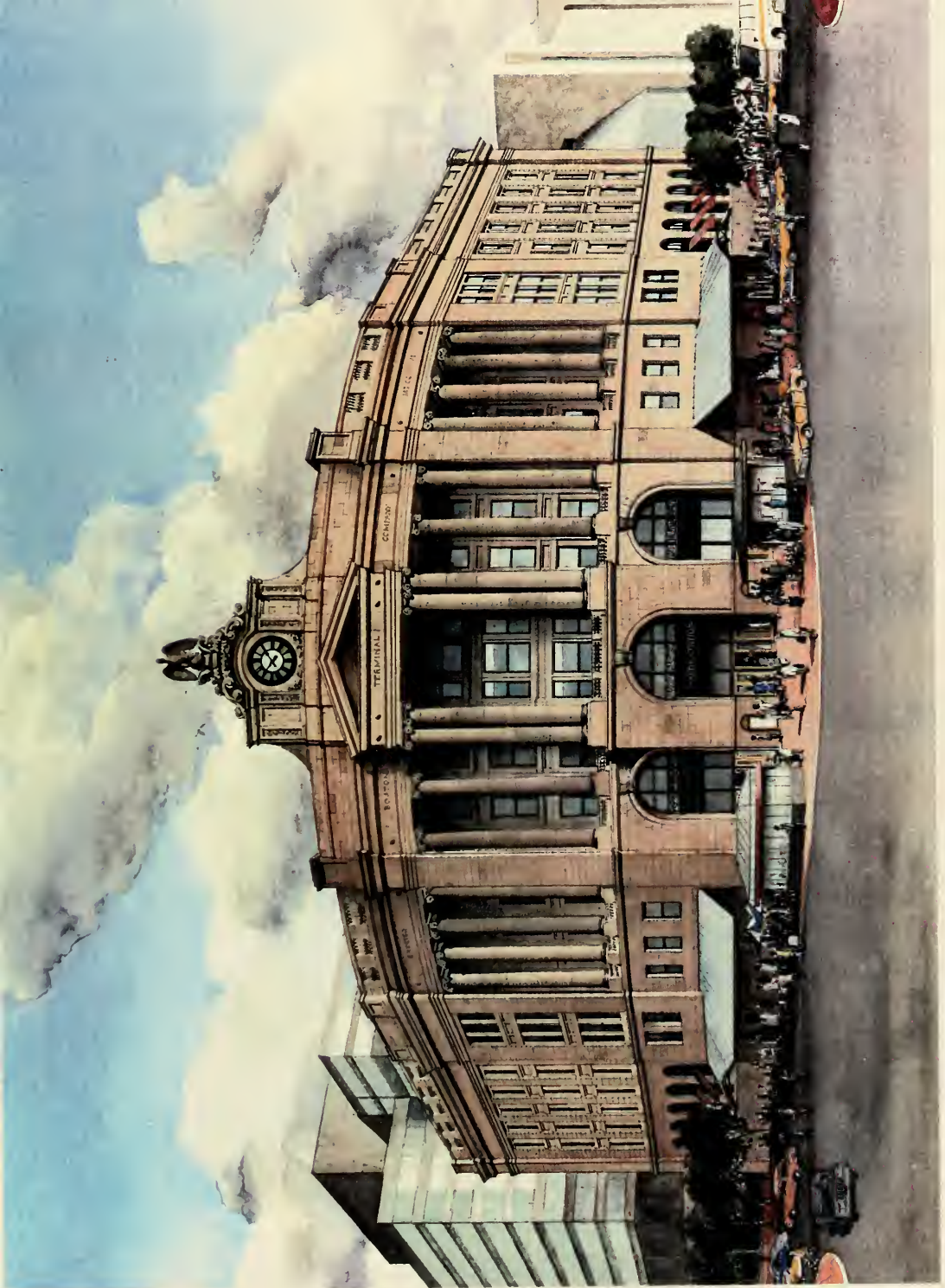
THIRD HARBOR
TUNNEL
2432 SPACES
LOST

SOUTH STATION AIR-RIGHTS

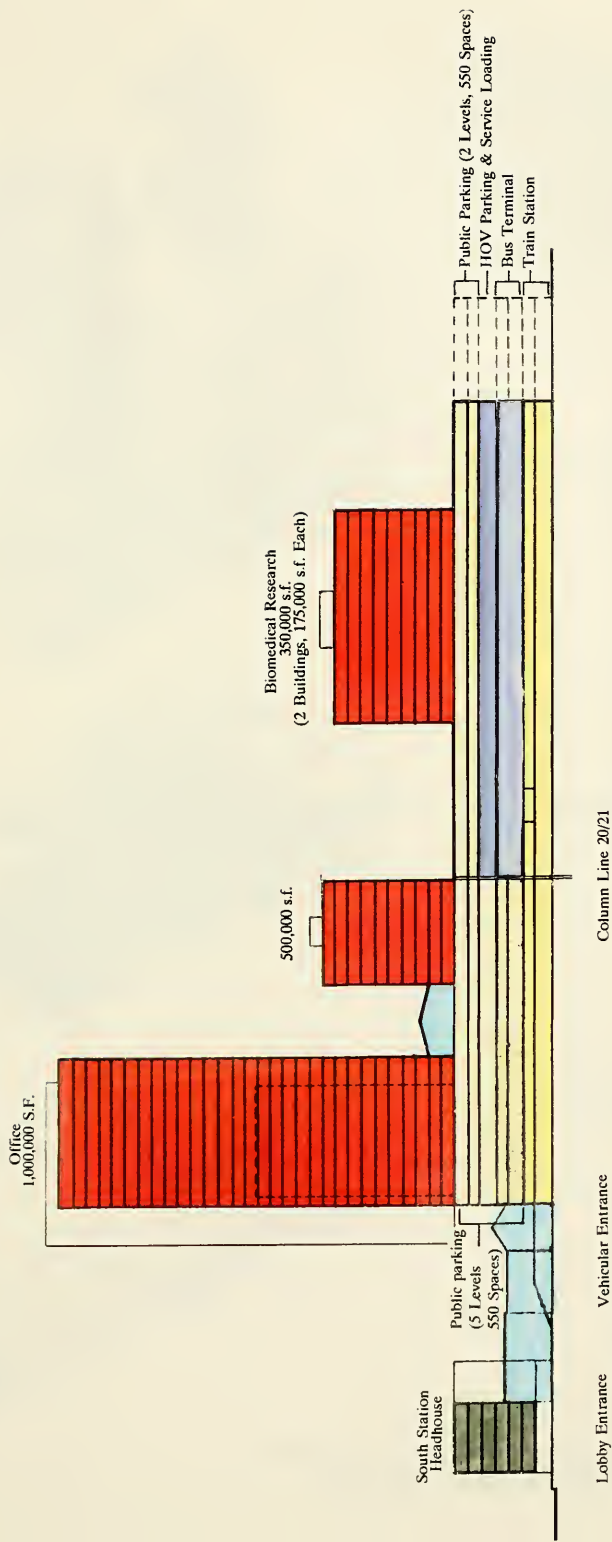
STON-BEDFORD
AGE
PARKING

US Postal Service
South Postal Annex

(Restricted use)







SOUTH STATION AIR RIGHTS DEVELOPMENT SCHEMATIC SECTION OF THE COMPLEX

I. Air Rights Development

A. Office tower

30 floors 1 million sq. ft.

B. Office / Research

10 floors 650,000 sq. ft.

C. TUDC Laboratory / Research

8 floors 350,000 sq. ft.

II. Parking & Service

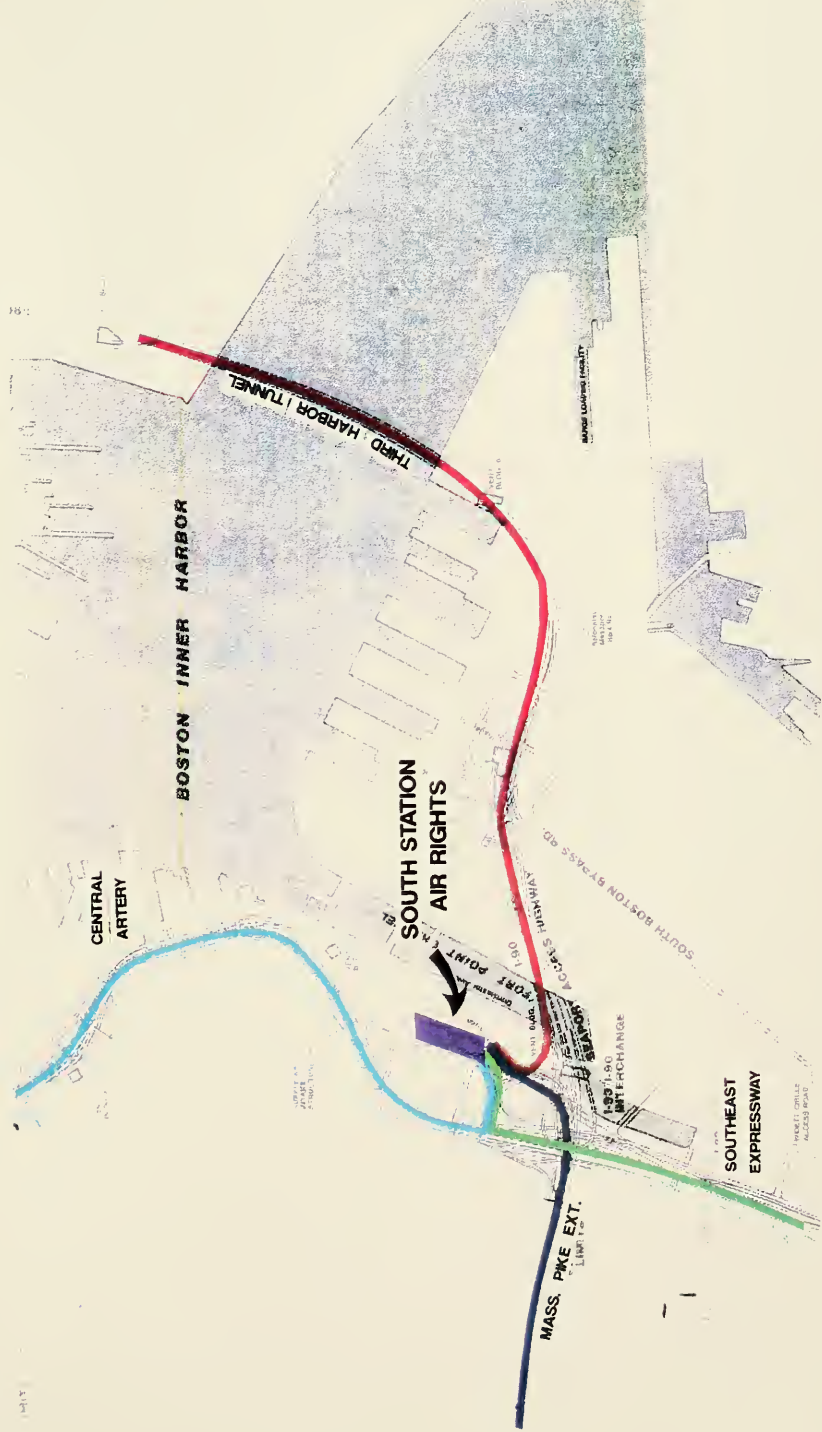
3 levels total 1300 spaces

III. MBTA Bus Terminal & Mezzanine

IV. Commuter / Amtrak train facility & Ventilation

**SOUTH STATION AIR RIGHTS DEVELOPMENT
EXPLODED VIEW OF THE COMPLEX**

TRANSPORTATION ACCESS



Public Investments

Artery/Tunnel Project

The South Station Technopolis will benefit from Boston's \$5 billion Artery/Tunnel Project in three major ways: first, South Station's construction and operation will be undisturbed during the Project's ten-year construction period, unlike the rest of downtown Boston; second, the South Station parking garage can meet a critical demand for parking displaced or made inaccessible by the Project's construction; and third, the completed Project will provide better highway access from South Station and its garage to the Central Artery, the Massachusetts Turnpike, and the Third Harbor Tunnel to Logan Airport.

The South Station project's first phase, an 1,100 car parking garage, will help to replace the hundreds of parking spaces in the surrounding area being lost over the next few years to the Artery/Tunnel Project and other projects. At the same time, during the Artery construction period commuters currently using parking in the heart of downtown will be searching for easier-to-reach alternatives on the southern edge of the Financial District, close to the major highways. South Station is the ideal location for this parking, because commuters using the Massachusetts Turnpike and the Southeast Expressway can access the site without extensive use of local streets and without entering the Central Artery. The garage entrance would be located a stone's throw from the first downtown exit and entrance ramps of these highways.

Because South Station's commuter rail services and new bus terminal will provide critical mass transit services alleviating traffic congestion during the Artery/Tunnel Project construction, South Station will be left undisturbed by the Project. The MBTA's bus terminal is planned as an integral part of the Artery/Tunnel Project, so it will not be delayed by Project activities. Neither will the phases of the South Station project be disrupted, with ample space provided for construction staging.

With the completion of a new Harbor Tunnel linking South Station directly to Logan Airport, frequent shuttle service within dedicated lanes will put South Station only moments away from the airport. In fact, Tunnel planners have envisioned South Station containing a ticketing and baggage handling terminal so that passengers can bypass the terminals at Logan and board planes directly. In addition, mass transit improvements linked to the Artery/Tunnel Project will make South Station the terminus for thousands of additional commuter bus and rail passengers on a daily basis.

High Speed Rail to NYC

Approximately one quarter of present Logan Airport flights are Boston-New York operations, serving almost 5 million passengers per year. Clearly dedicating so much of Logan's capacity to this single destination seriously compromises the role of the airport in supporting future economic growth.

Federal Courthouse and Fort Point Transit

In 1997, a major shift in Boston's center of gravity will occur: a new Federal Courthouse will be opened on Fan Pier across the Fort Point Channel from South Station, moving out of Post Office Square in the middle of the Financial District. South Station will be the terminus of a new transit line linking the new Courthouse to downtown Boston. Law firms and other tenants seeking a location close to the new courthouse, yet still within the downtown, will look to South Station.

Another advantage to South Station resulting from the Courthouse relocation is the displacement of a massive 1,300-car surface parking lot on Fan Pier that presently serves the Financial District. The 1,100-car garage to be built in the South Station Technopolis will receive heavy demand from these commuters displaced by the courthouse construction. With the construction of the Third Harbor Tunnel, which crosses the Fort Point District, scheduled to begin this year, even more parking across the Fort Point Channel will be taken or rendered inaccessible to commuters and Financial District employees.

Bio-science Line

South Station is under consideration as the downtown terminus for a new subway line linking the major medical and scientific research institutions in Boston and Cambridge. The proposed transit line will link the Longwood Medical Area and Olmsted Plaza, Boston University, the Charlestown Navy Yard, Northeastern University and Ruggles Center, South End Technology Square, and M.I.T., among others, to South Station,

thereby creating direct transit accessibility between the most renowned medical and scientific research complexes in the world. South Station will be the premier location for services firms who want direct access to Boston's growing medical and scientific economy.

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